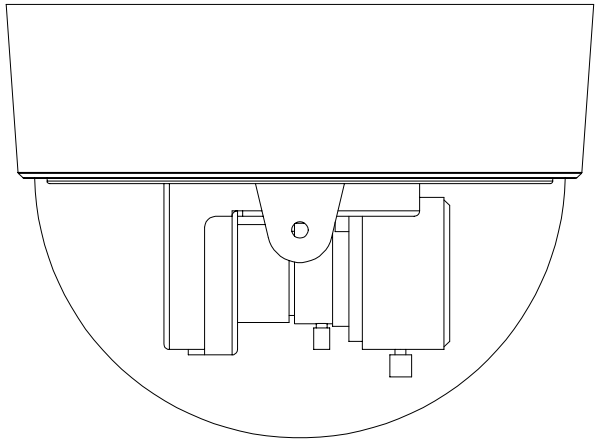
# ED300 Series



User’s Manual

and

Operation Instructions

Version 1.0

# Table of Contents

*Notice* ..... *1*

*Safety Warning* ..... *2*

*Introduction* ..... *3*

*Specification* ..... *4*

**Major Parts Names and Functions** ..... *5*

**Installation Instructions** ..... *7*

**Adjustments** ..... **8**

**Lens Adjustments** ..... **9**

# Notice

This manual is presented to the users of ED300 by EverFocus Electronics Corp. With years of engineering researches, EverFocus has spared all efforts to provide the high quality products to the worldwide users. For the policy of continual product improvement, EverFocus reserves the right to make changes to the product specifications and documentation without notice. All the components of the products, including accessories, components, and outlook, are based on the agreements of each deals to satisfy all kinds of users. Please be advised that every step of operation must follow the instruction of this manual to keep ED300 working under the best condition. Please notice that EverFocus will not be charged any claims or renewing cases resulted from inappropriate operation.

# Safety Warning

1. **Do not expose the camera to humidity and dust.**

   Moisture can damage the camera and cause the danger of electric shock. If the camera is mounted outdoors, a camera housing is required. Do not install the camera at where there is greasy smoke or steam, where the humidity is too high, or where there is a lot of dust to prevent damages to the camera.

2. **Do not disassemble the camera.**

   Do not disassemble the camera body as it is dangerous and may cause the damages to the camera. Refer all servicing to qualified service personnel.

3. **Handle the camera with care.**

   Be careful when handling the camera, do not drop it or subject it too strong shock or vibration to prevent any damages to it.

4. **Do not install the camera near electric or magnetic fields.**

   Installed the camera away from TV, radio transmitter, magnet, electric motor, transformer, audio speakers because the magnetic fields generate from above devices will distort the video image.

5. **Do not install the camera in the high temperature environment.**

   Installed the camera away from stoves, or other heat generating devices, or where it could be subject to direct sunlight as the high temperatures could cause deformation, discoloration or other damages of the camera. Install the camera at where the temperature range will stay between 0℃ to 50℃(32℉ to 122℉).

6. **Cleaning**

   Use a soft cloth to remove the dirt from the unit. Use lens tissue or a cotton tipped applicator and ethanol to clean the camera lens.

# Introduction

The ED300 Series Cameras are compact, full functioned CCD Color Cameras. Their stylish appearance can be applied as per installer's ideal locations on the ceiling. The dome camera designed with advanced digital processing curcuitry for high resolution 1/4" color interline transfer CCD sensor, it has DIP switch for AGC on/off, BLC on/off. The dome camera uses a vari focal auto iris lens for discreet surveillance or close-up viewing and it features with iris LEVEL volume control for the best viewing quality.

## Main Features

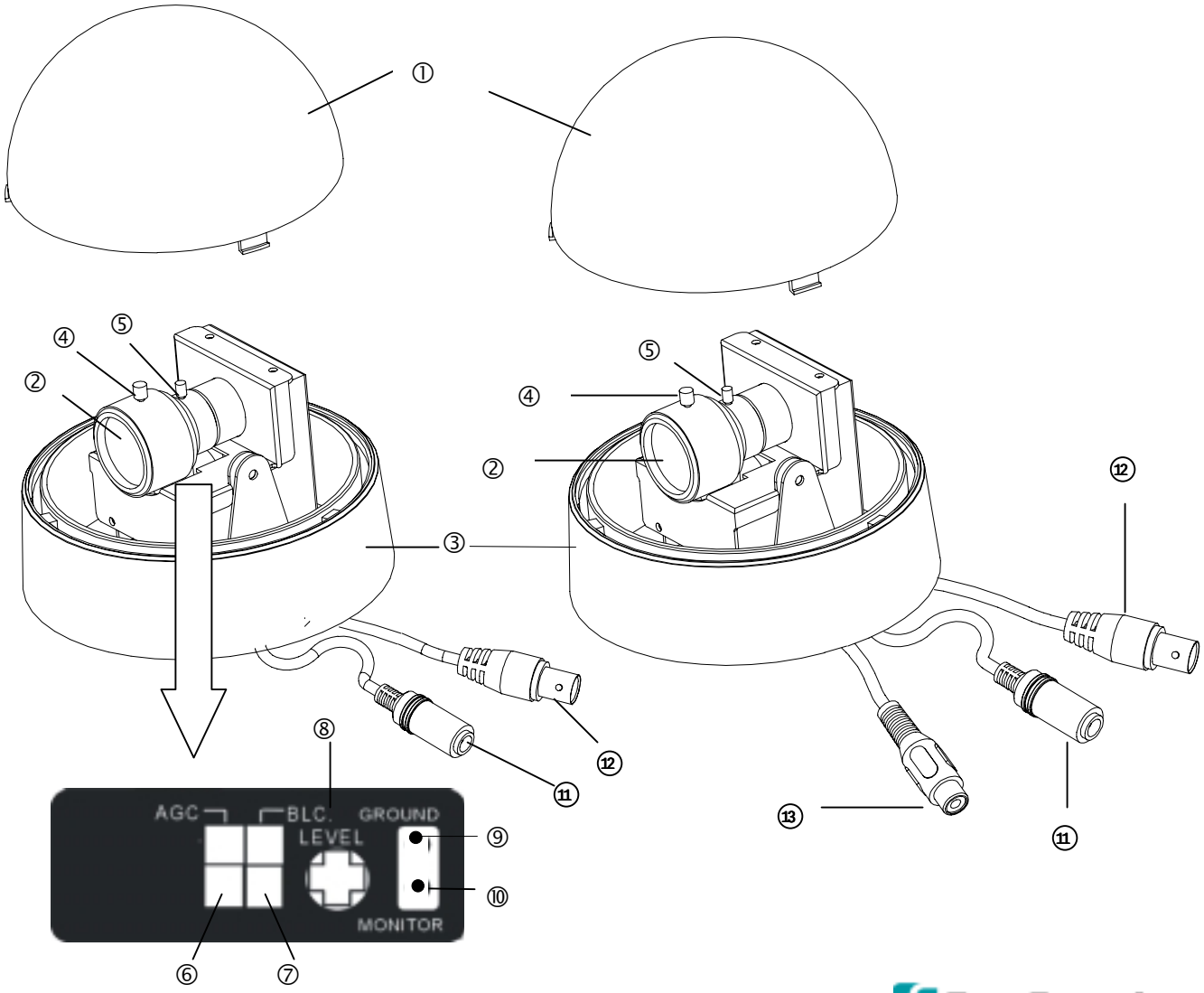
- Designed with advanced digital signal processing circuitry for high image quality.
- The high sensitivity of 1.0 lux / F=1.2 is achieved by high-resolution 1/4” Interline transfer CCD.
- Built-in Vari Focal type, mechanical auto iris lens, f=2.8-5.8mm, F=1.4-1.8.
- Able to adjust the viewing range with manual zoom lens.
- With manual PAN/TILT mechanism.
- BLC and AGC function on/off switchable.
- Compact size : 108mm O.D. x 80mm H.
- System available for NTSC or PAL

# Specification

| | |
|---|---|
| **Pickup device:** | 1/4" Interline transfer CCD |
| **Video format:** | NTSC/PAL |
| **Scanning system:** | NTSC: 525 TV lines, 60 fields/sec; PAL: 625 TV lines, 50 fields/sec. |
| **Picture elements:** | NTSC: 811(H) x 508 (V); PAL: 795 (H) x 596 (V) |
| **Effective picture elements:** | NTSC: 768 (H) x 494 (V); PAL: 752 (H) x 582 (V) |
| **Horizontal resolution:** | 480 TV lines |
| **Sensitivity:** | 1.0 lux / F=1.2 |
| **S/N ratio:** | > 48 dB |
| **Varifocal lens:** | f=2.8~5.8mm, F1.4~1.8 manual zoom and focus adjustment, mechanical auto IRIS |
| **IRIS level:** | Adjustable |
| **Back light comp.:** | On / Off Switch |
| **Auto Gain Control:** | On / Off Switch |
| **Auto white balance:** | Yes |
| **Gamma correction:** | 0.45 |
| **Monitor output pin:** | Yes, 1.0 Vp-p / 75 ohm, test point pin |
| **Video output:** | 1.0Vp-p/75ohm |
| **Sync. mode:** | Internal sync. |
| **Audio** | Available for model ED300A |
| **Power source** | 12VDC, 300mA |
| **Dimension:** | 108 mm O.D. x 80 mm H |
| **Operating temperature:** | $0^{o}$C to +$50^{o}$C |
| **Power consumption:** | 5W max. |

# Major Parts Names and Functions

《ED300》 《ED300A》(with audio)



**① Camera Cover**
This cover will protect the camera from dust and damage.

**② Lens**
This Vari-Focal Lens allows users to adjust the Zoom and Focus manually.

**③ Base**
The camera unit is set in the dome base when it is shipped from the factory.

**④ Focus Ring**
To set the focus, loosen the Focus ring knob first, then turn the ring toward <FAR> or <NEAR> as necessary. When the focus is obtained as desired, tighten the focus ring knob.

**⑤ Zoom Ring**
Loosen the zoom ring knob, then you can adjust the viewing range. Turn the ring towards <WIDE> or <TELE> as necessary. When the setting is finished, tighten the zoom ring knob.

**⑥ Auto Gain Control on/off switch**.
The factory setting is AGC on.

**⑦ Back Light Compensation on/off switch**
The factory setting is BLC off.

**⑧ Level Volume Control**
The iris level control for the lens.

**⑨ Ground Pin**
For monitor use. Please see ⑩.

**⑩ Monitor Pin**
When setting up the camera, connect a monitor to this video output pin and to the GROUND pin using alligator clip cables, then using the image displayed on the monitor, set the surveillance angle.

**⑪ Power input DC-JACK**
Use the connector to connect with 12VDC-power adaptor.

**⑫ Video Output BNC Connector**
Use the connector to connect with the video in connector of a monitor.

**⑬ Audio Output RCA Connector**
Use the connector to connect with the audio in connector of a monitor.

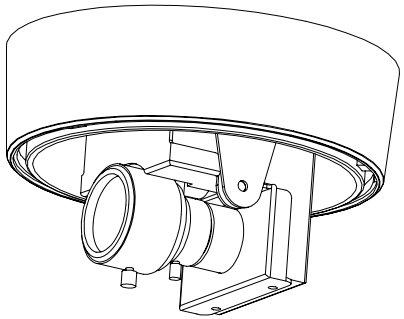
# Installation Instructions

1. Remove the plastic dome cover.
2. Lossen the two screws of the supporting bracket to remove the camera body.
3. Using four screws to fix the camera base on the ceiling.
4. Put the camera body back to the supporting bracket, then tighten the two screws to fix the camera.
5. Connect the BNC connector of the camera to a color monitor, or other video device through a 75 ohm type coaxial cable with BNC female connector at cable extension.
6. Connect the DC+12V regulated power source of the camera (DC Jack) to the DC12V Power-in jack with 2mm, center+, outer- plug.
7. Connect the audio output connector of the camera(model ED300A) to the audio in connector of the monitor.

**NOTE:** Be very careful not to scratch or damage the lens while making any kind of setting.

# Lens Adjustments

## ◆ Zoom and focus adjustments



After the camera was installed, the zoom and focus of the lens must be adjusted.

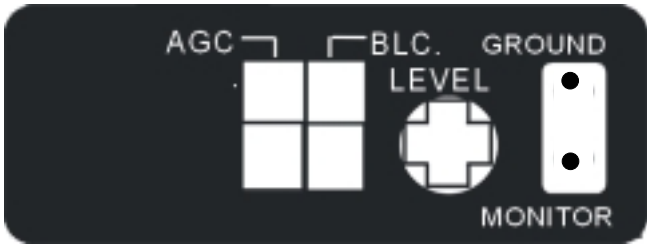
1. Loosen the zoom ring knob, and then turn the ring towards <WIDE> or <TELE> as necessary to obtain the desired view range.
   WIDE side (Zoom out)
   The viewing range will be wider and the subject is smaller.
   TELE side (Zoom in)
   The viewing range will be smaller and the subject is larger.

2. Loosen the focus ring knob, then turn the ring towards <FAR> or <NEAR> as necessary to obtain the clear video image.

3. Repeat steps 2 and 3 until the best image is obtained. Once the lens setting finished, tighten the zoom ring and the focus ring knobs.

# Adjustments

## ❖ Auto Gain Control Adjustment




**AGC ON:** The sensitivity increases automatically when the light is low.
**AGC OFF:** A low-noise picture is obtained under a low light condition.

## ❖ Back Light Compensation

### Adjustment

When the background of the subject is very bright and the subject itself is dark, set the BLC (Back Light Compensation) ON. The BLC will measure the light of the image center and the lens iris will automatically set for optimum image quality.

## ❖ Level Volume Control

The iris level of lens can be adjusted by the level control. Turn the level control to the right direction and video images will become brighter; turn the level control to the left direction and the video images will become darker.

## *EverFocus Electronics Corp.*

Head Office:
10F-6, No.79 Sec. 1 Shin-Tai Wu Road,
Hsi-Chi, Taipei, Taiwan
TEL : 886-2-26982334
FAX: 886-2-26982380

USA Office:
2975 Huntington Drive, Suite 101-102
San Marino, CA. 91108
U.S.A.
TEL : 1-626-844-8888
FAX: 1-626-844-8838
Toll free : 1-888-383-6287 or

Hong Kong Office:
Room 18, 11/F1, Pacific Trade Centre
2 Kai Hing Road, Kowloon Bay, Hong Kong
TEL : 852-2758-9871
FAX: 852-2758-9056

European Office:
Fasanenweg 3, D-46446 Emmerich
Germany
TEL : 49-2822-9394-0
FAX: 49-2822-939495


EverFocus®

P/N : MED3G00100